

Serial No. 10/633,551

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1 and 9-11 in accordance with the following:

1. (Currently Amended) A computer program for a multimedia processing method used in a multimedia processing apparatus that includes:

a multimedia information database that stores multimedia information;

an ontology information database that stores ontology information;

a name information database that stores name space information;

an installation space information database that stores part table list information corresponding to the installation space;

a registration control unit that controls registration of information at the multimedia information database, at the ontology information database, at the name information database, and at the installation space information database; and

an ontology generating unit that generates ontology, the ontology generating unit being configured to read the part table list information from the installation space information database and to set name information based on an item to be conceptualized, the program making that makes a computer execute:

selecting a specific element from an installation space having a plurality of elements where each element to be given a name is hierarchically expressed on one of a plurality of interrated levels;

generating a name space ontology by setting a table of mutual relationships of concept expressed between two pieces of name information which is ruled as an extensible markup language name space in worldwide web consortium, the mutual relationships including lateral relationships and vertical relationships, wherein the name space ontology is a hierarchy of names assigned to respective elements from the installation space with the selected element having a respective name at a top level of the name space ontology;

determining a layer depth of the name space; and

linking each name of the name space ontology with multimedia information related to the element having the name assigned thereto, and storing the multimedia information linked with

Serial No. 10/633,551

the name into the multimedia information database.

2. (Previously Presented) The computer program according to claim 1, wherein the generating includes generating the name space ontology according to the specific element being set.

3. (Previously Presented) The computer program according to claim 1, further making the computer execute deciding whether to give the specific element set a name from the name candidates in the name space ontology.

4. (Original) The computer program according to claim 1, wherein the generating includes collating obtained name information with previously obtained name information, and checking duplication of names based on the collation.

5. (Original) The computer program according to claim 4, wherein the generating includes checking the duplication of names within a domain to which the name information belongs.

6. (Original) The computer program according to claim 1, wherein the generating includes obtaining name information with an extension.

7. (Previously Presented) The computer program according to claim 1, further making the computer execute setting a security gate based on an environment in which the name is used, wherein the security gate limits a range of names that can be searched for or referred to.

8. (Previously Presented) The computer program according to claim 7, further make the computer execute

searching for a name corresponding to the name space ontology and multimedia information that is linked with the name, and
outputting a result of the search corresponding to the security gate.

9. (Currently Amended) A multimedia processing apparatus comprising:

a multimedia information database that stores multimedia information;

an ontology information database that stores ontology information;

Serial No. 10/633,551

a name information database that stores name space information;
an installation space information database that stores part table list information
corresponding to the installation space;
a registration control unit that controls registration of information at the multimedia
information database, at the ontology information database, at the name information database,
and at the installation space information database; and
an ontology generating unit that generates ontology, the ontology generating unit being
configured to read the part table list information from the installation space information database
and to set name information based on an item to be conceptualized, wherein
the ontology generating unit is configured to select a selecting unit that selects a specific
element from an installation space having a plurality of elements where each element to be
given a name is hierarchically expressed on one of a plurality of interrelated levels;
the ontology generating unit is configured to generate a generating unit that generates a
name space ontology by setting a table of mutual relationships of concept expressed between
two pieces of name information which is ruled as an extensible markup language name space in
worldwide web consortium, the mutual relationships including lateral relationships and vertical
relationships, wherein the name space ontology is a hierarchy of names assigned to respective
elements from the installation space with the selected element having a respective name at a
top level of the name space ontology, and that determines to determine a layer depth of the name
space; and
a linking unit that links the registration control unit is configured to link each name of the
name space ontology with multimedia information related to the element having the name
assigned thereto, and to store the multimedia information linked with the name into the
multimedia information database.

10. (Currently Amended) A multimedia processing method used in a multimedia
processing apparatus that includes:

a multimedia information database that stores multimedia information;
an ontology information database that stores ontology information;
a name information database that stores name space information;
an installation space information database that stores part table list information
corresponding to the installation space;
a registration control unit that controls registration of information at the multimedia
information database, at the ontology information database, at the name information database,

Serial No. 10/633,551

and at the installation space information database; and

an ontology generating unit that generates ontology, the ontology generating unit being configured to read the part table list information from the installation space information database and to set name information based on an item to be conceptualized, the method comprising:

selecting a specific element from an installation space having a plurality of elements where each element to be given a name is hierarchically expressed on one of a plurality of interrated levels;

generating a name space ontology by setting a table of mutual relationships of concept expressed between two pieces of name information which is ruled as an extensible markup language name space in worldwide web consortium, the mutual relationships including lateral relationships and vertical relationships, wherein the name space ontology is a hierarchy of names assigned to respective elements from the installation space with the selected element having a respective name at a top level of the name space ontology,

determining a layer depth of the name space; and

linking each name of the name space ontology with multimedia information related to the element having the name assigned thereto, and storing the multimedia information linked with the name into the multimedia information database.

11. (Currently Amended) A name ontology generating method used in a multimedia processing apparatus that includes:

a multimedia information database that stores multimedia information;

an ontology information database that stores ontology information;

a name information database that stores name space information;

an installation space information database that stores part table list information corresponding to the installation space;

a registration control unit that controls registration of information at the multimedia information database, at the ontology information database, at the name information database, and at the installation space information database; and

an ontology generating unit that generates ontology, the ontology generating unit being configured to read the part table list information from the installation space information database and to set name information based on an item to be conceptualized, the method of generating a name ontology for a plurality of elements that are arranged in an hierarchical order and linking multimedia information to the elements after naming the elements, and the method comprising:

specifying an element as a target element;

Serial No. 10/633,551

generating name ontology for the target element and all the elements below the target element in the hierarchical order based on name information by setting a table of mutual relationships of concept expressed between two pieces of name information which is ruled as an extensible markup language name space in worldwide web consortium, the mutual relationships including lateral relationships and vertical relationships;

determining a layer depth of the name space;

naming the target element and the elements below the target element based on the generated name ontology; and

linking multimedia information to the elements that are named at the naming, and storing the multimedia information linked to the elements into the multimedia information database.

12. (Previously presented) The method according to claim 11, further comprising: receiving the name information that is to be used at the generating to generate the name ontology.

13. (Previously presented) The method according to claim 11, further comprising: selecting a name information, out of a plurality of name information stored in a database of name information, as the name information that is to be used at the generating to generate the name ontology.

14. (Previously presented) The method according to claim 11, further comprising: generating the name ontology at the generating based on a neural network.

15. (Previously presented) The method according to claim 11, further comprising: generating the name ontology at the generating based on fuzzy logic.

16. (Previously presented) The method according to claim 11, further comprising: generating the name ontology at the generating based on a genetic algorithm.

17. (Previously presented) The computer program according to claim 1, wherein the name information is organized such that if a sub-element is part of a group element, the name information contains the name of the sub-element, the level of the sub-element, the name of the group element and the level of the group element, and the name space ontology is prepared by a process comprising:

Serial No. 10/633,551

looking for a name;

determining if the name is compatible with other names in the name space
ontology;

comparing the name with the name information to identify the level associated
with the name; and

determining the mutual relationships between the names based on known hierarchical
relationships between the levels.